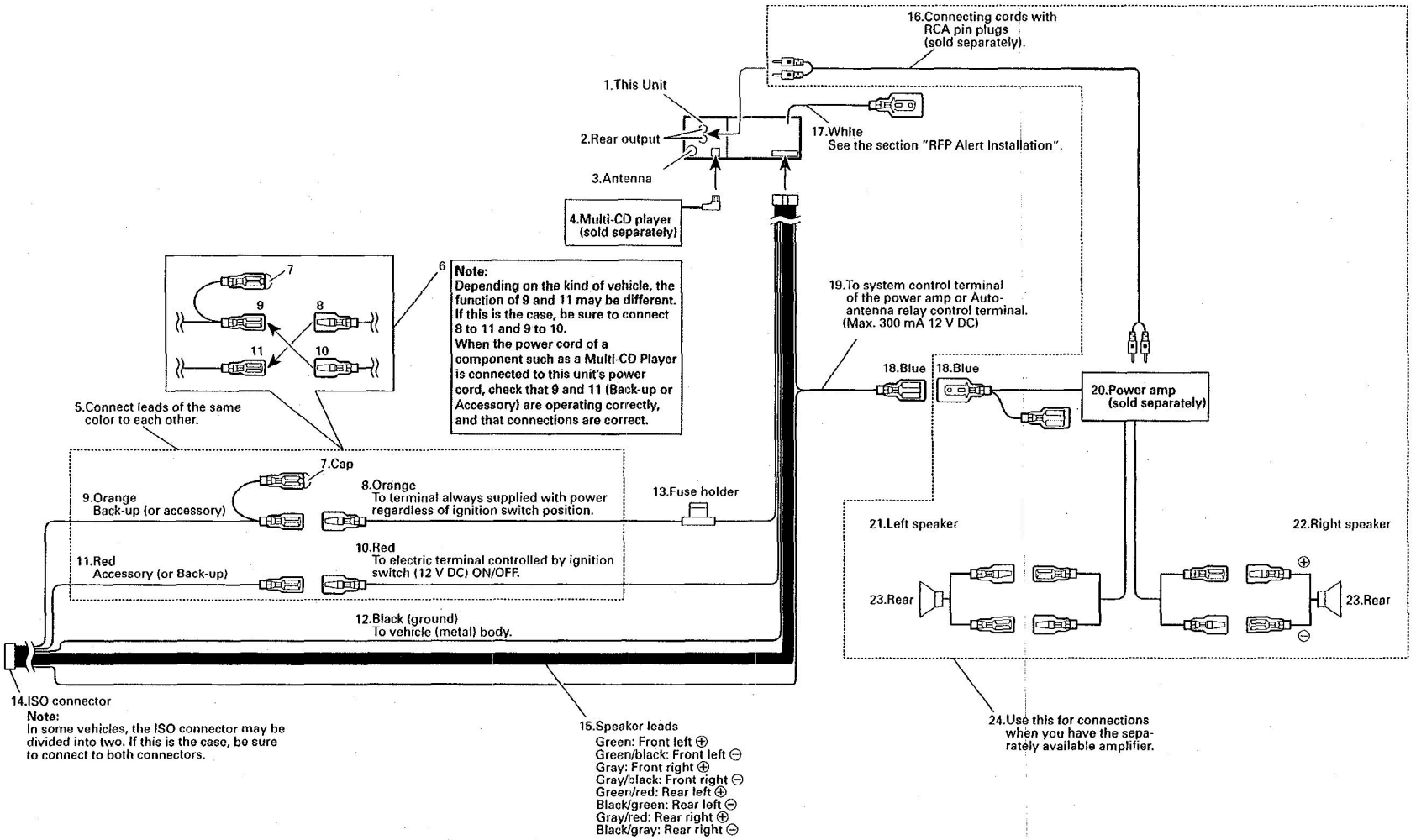
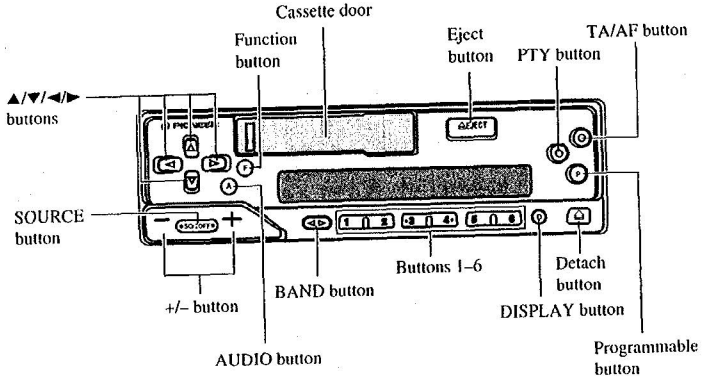

16.Connecting cords with RCA pin plugs (sold separately).
1.This Unit
2.Rear output
3.Antenna
17.White
See the section "RFP Alert Installation".
4.Multi-CD player (sold separately)
6
Note:
Depending on the kind of vehicle, the function of 9 and 11 may be different. If this is the case, be sure to connect 8 to 11 and 9 to 10.
When the power cord of a component such as a Multi-CD Player is connected to this unit's power cord, check that 9 and 11 (Back-up or Accessory) are operating correctly, and that connections are correct.
19.To system control terminal of the power amp or Auto-antenna relay control terminal. (Max. 300 mA 12 V DC)
18.Blue
18.Blue
20.Power amp (sold separately)
5.Connect leads of the same color to each other.
7.Cap
8.Orange
To terminal always supplied with power regardless of ignition switch position.
9.Orange
Back-up (or accessory)
13.Fuse holder
21.Left speaker
22.Right speaker
10.Red
To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
11.Red
Accessory (or Back-up)
23.Rear
23.Rear
12.Black (ground)
To vehicle (metal) body.
14.ISO connector
Note:
In some vehicles, the ISO connector may be divided into two. If this is the case, be sure to connect to both connectors.
15.Speaker leads
Green: Front left ⊕
Green/black: Front left ⊖
Gray: Front right ⊕
Gray/black: Front right ⊖
Green/red: Rear left ⊕
Black/green: Rear left ⊖
Gray/red: Rear right ⊕
Black/gray: Rear right ⊖
24.Use this for connections when you have the separately available amplifier.

Key Finder

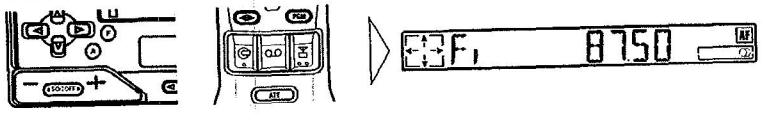
■ Head Unit



Basic Operation

Switching Power ON/OFF

- **Select the desired source (such as the tuner).**



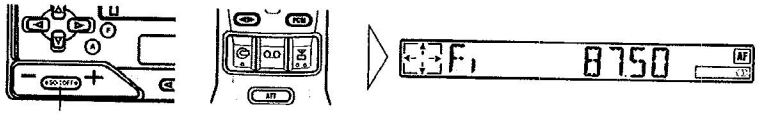
■ Head Unit

Each press of the SOURCE button selects the desired source in the following order:
Tuner → Tape → Multi-CD player → AUX

To switch the sources OFF, hold down the SOURCE button for 1 second or more.

Basic Operation of Tuner

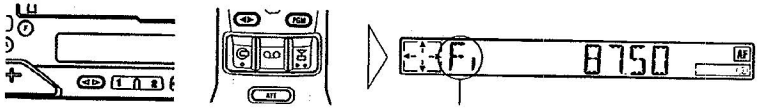
1. **Select Tuner. (See page 63.)**



Each press
changes the Source ...

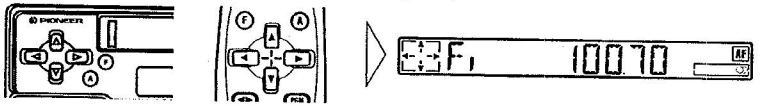
The program service name or frequency appears on the display.
("◯" indicator lights when a stereo station is selected.)

2. **Select the desired band.**



FI → FII → FIII → MW/LW

3. **Tune the receiver to a higher or lower frequency.**

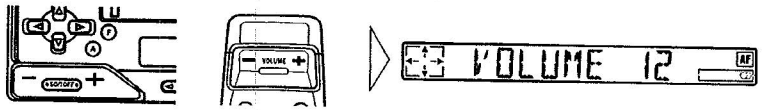


This product's tuner lets you select the tuning by changing the length of the time you press the button.

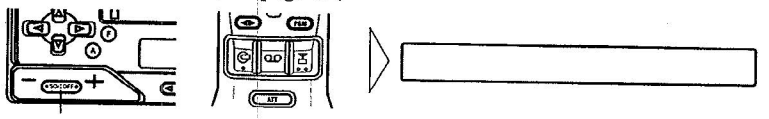
Manual Tuning (step by step)	0.3 seconds or less
Seek Tuning	0.3 – 2 seconds
Manual Tuning (continuously)	2 seconds or more

Note:
- To select a weak broadcasting station that cannot be tuned in with the Seek Tuning function, tune in with Manual Tuning.

4. **Raise or lower the volume.**



5. **Turn the source OFF. (See page 63.)**



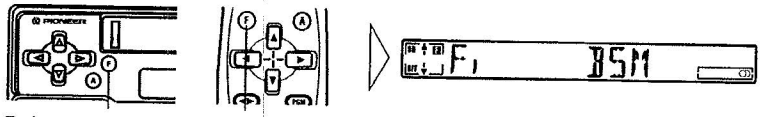
Hold for 1 second

Entering the Function Menu

In this menu you can select tuner functions.

Note:
- REG, TA, PTY, and AF are RDS functions. Refer to "Using RDS Function" for details and instructions on how to use these functions.

- **Select the desired mode in Function Menu.**



Each press
changes the Mode ...

Each press
changes the Mode ...

Each press of the Function button selects the mode in the following order:
BSM → REG → LOCAL → TA → PTY SELECT → AF

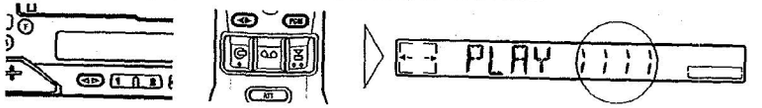
Note:
- You can cancel the Function Menu by pressing the BAND button.
- After selecting the Function Menu, if you do not perform an operation within about 30 seconds, the Function Menu is automatically canceled.

Basic Operation of Cassette Player

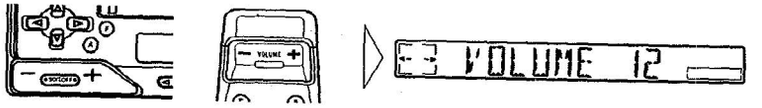
1. **Insert the cassette tape.**

"METAL" appears on the display for 2 seconds when a metal or chrome tape is inserted. Nothing is displayed for a normal tape.

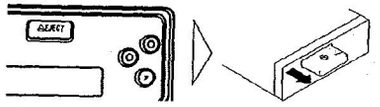
2. **Switch tape playback from side A to side B, or vice versa.**



3. **Raise or lower the volume.**



4. **Remove the cassette tape.**



Note:

- The Tape function can be turned ON/OFF with the cassette tape remaining in this product. (See page 63.)

Fast Forward/Rewind and Music Search

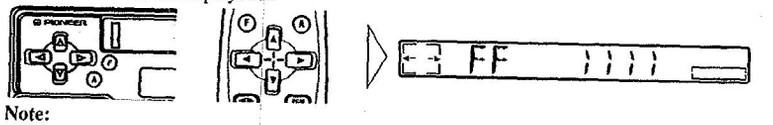
■ Fast Forward and Forward-Music Search

While "FF" is displayed, the system fast-forwards the cassette tape to the end of the current side.

While "F-MS" is displayed, the system winds the cassette tape forward to the beginning of the next song, then play begins from that point.

- **Select the desired mode in the following order:**

FF → F-MS → Normal playback



Note:

- Fast Forward (FF) and Forward-Music Search (F-MS) can be canceled by pressing the BAND button during FF or F-MS operation.

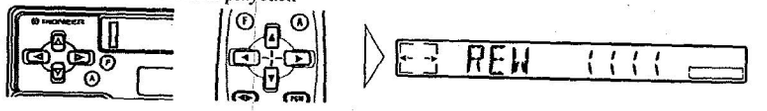
■ Rewind and Rewind-Music Search

While "REW" is displayed, the system rewinds the cassette tape to the beginning of the current side.

While "R-MS" is displayed, the system rewinds the cassette tape to the beginning of the current song, then play begins from that point.

- **Select the desired mode in the following order:**

REW → R-MS → Normal playback



Note:

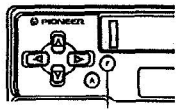
- Rewind (REW) and Rewind-Music Search (R-MS) can be canceled by pressing the BAND button during the REW or R-MS operation.

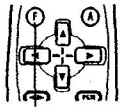
Using the Cassette Player

Entering the Function Menu

In this menu you can select Tape functions.

- **Select the desired mode in Function Menu.**


Each press
changes the Mode ...


Each press
changes the Mode ...

Each press of the Function button selects the mode in the following order:
REPEAT → B SKIP → RI → B NR

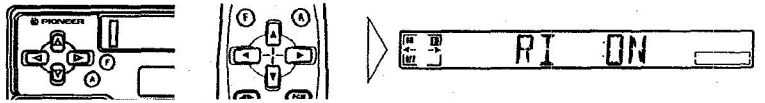
Note:
- You can cancel the Function Menu by pressing the BAND button.
- After selecting the Function Menu, if you do not perform an operation within about 30 seconds, the Function Menu is automatically canceled.

Radio Intercept

This function allows you to listen to the radio during tape fast-forwarding/rewinding.

Note:
- The radio intercept function does not work during a Music Search operation.

1. **Select the Radio Intercept mode in the Function Menu.**
2. **Switch the Radio Intercept mode ON or OFF.**



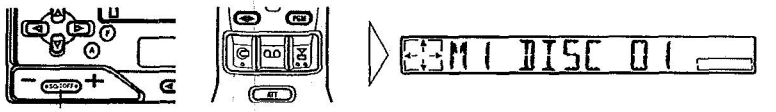
Note:
- Pressing the BAND button cancels the Function Menu.

Using Multi-CD Players

This product can control one or more multi-CD players.

Basic Operation of Multi-CD Players

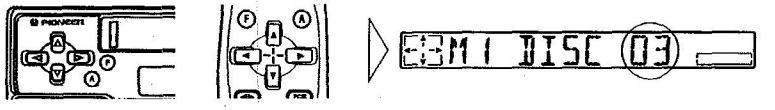
1. **Select the multi-CD player source. (See page 63.)**



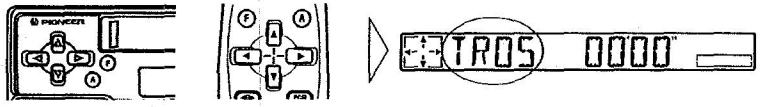
Each press
changes the Source ...

Note:
- The multi-CD player may perform a preparatory operation, such as verifying the presence of a disc or reading disc information, when the power is turned ON or a new disc is selected for playback. "READY" is displayed.
- If the multi-CD player cannot operate properly, an error message such as "ERROR 14" is displayed. Refer to the multi-CD player owner's manual.

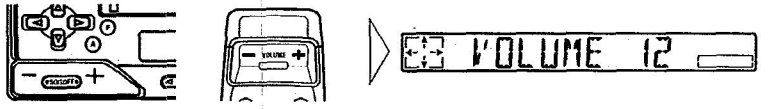
2. **Select the desired disc.**



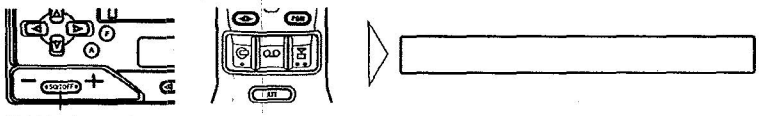
3. **Reverse or advance track by track.**



4. **Raise or lower the volume.**



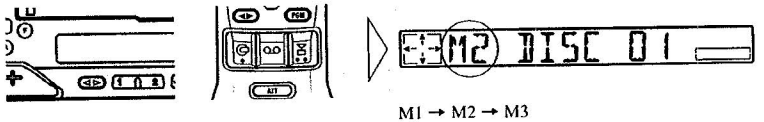
5. **Turn the source OFF. (See page 63.)**


Hold for 1 second

Switching the Multi-CD Player

It is possible to connect up to three multi-CD players by means of a multiple installation adapter. When two or more multi-CD players are installed, their priorities must be specified. Follow the multi-CD player instructions carefully, and set the address switches properly.

- **Select the multi-CD player you want to use.**



M1 → M2 → M3

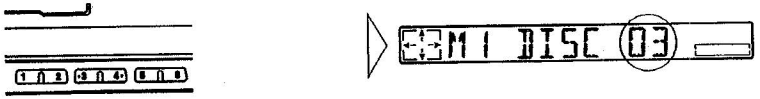
Disc Number Search

■ Disc Number Search (for 6-Disc, 12-Disc types)

You can select discs directly with the 1 to 6 buttons. Just press the number corresponding to the disc you want to listen to.

Note:
- When a 12-Disc Multi-CD Player is connected and you want to select disc 7 to 12, press the 1 to 6 buttons for 2 seconds or longer.

- **Select the desired disc. (eg. Press button 3.)**

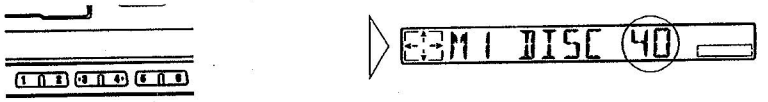


■ Disc Number Rough Search (for 50-Disc type only)

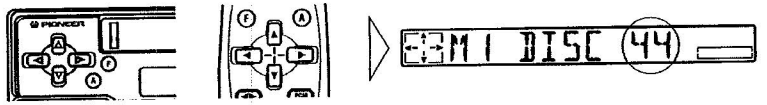
This handy function lets you select discs loaded in a 50-Disc Multi-CD Player using the 1 to 5 buttons. The 50 discs are divided into five blocks, with each of the 1 to 5 buttons assigned to a block.
For example, if you press button 1, discs 10 through 19 are searched in order, and then the disc with the lowest disc number is selected.

Note:
- Pressing button 5 lets you select the 50th disc only.
- Button 6 does not operate.
- Rough search of discs 1 to 9 is not possible. Use the ▲/▼ buttons to select a desired disc.

1. **Press the appropriate button from 1 to 5 to select the block containing the desired disc. (eg. Press button 4.)**



2. **Select the desired disc.**



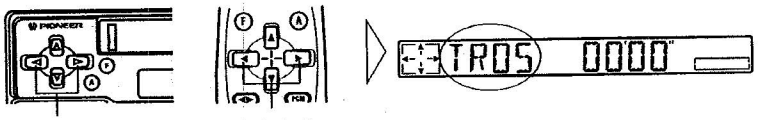
Track Search and Fast-forward/Reverse

Besides Track Search convenience when searching for a desired track, this unit also lets you fast-forward and reverse through tracks to find a desired phrase or section of music.

■ Track Search

This feature enables you to advance or reverse track by track.

- **Reverse or advance track by track.**



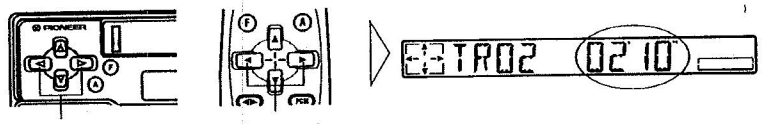
Hold for half a second or less

Hold for half a second or less

■ Fast-forward/Reverse

This feature enables you to advance or reverse at high speed between tracks.

- **Reverse or fast-forward through tracks.**



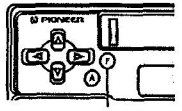
Continue pressing

Continue pressing

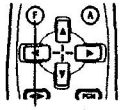
Entering the Function Menu

In this menu you can select Multi-CD Player functions.

- **Select the desired mode in Function Menu.**



Each press changes the Mode ...



Each press changes the Mode ...

Each press of the Function button selects the mode in the following order:
REPEAT → RANDOM → ITS P → PAUSE

Note:

- You can cancel the Function Menu by pressing the BAND button.
- After selecting the Function Menu, if you do not perform an operation within about 30 seconds, the Function Menu is automatically canceled.
- Pressing the BAND button cancels the Function Menu.

General

Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 8.5 A
Dimensions
(mounting size) .... 178 (W) × 50 (H) × 150 (D) mm
(front face) ..... 188 (W) × 58 (H) × 19 (D) mm
Weight ..... 1.2 kg

Amplifier

Maximum power output ..... 35 W × 4
Continuous power output ..... 22 W × 4
(DIN45324, +B = 14.4 V)
Load impedance ..... 4 Ω (4 – 8 Ω allowable)
Preout output level/output impedance ..... 500 mV/1 kΩ
Tone controls
(Bass) ..... ±12 dB (100 Hz)
(Treble) ..... ±12 dB (10 kHz)
Loudness contour ..... +10 dB (100 Hz), +7 dB (10 kHz)
(volume: –30 dB)

Cassette player

Tape ..... Compact cassette tape (C-30 – C-90)
Tape speed .... 4.76 cm/sec. (+0.14 cm/sec, -0.05 cm/sec.)
Fast forward/rewinding time .. Approx. 100 sec. for C-60
Wow & flutter ..... 0.09% (WRMS)
Frequency response ..... Metal: 30 – 19,000 Hz (±3 dB)
Stereo separation ..... 45 dB
Signal-to-noise ratio
..... Metal: Dolby B NR IN: 67 dB (IEC-A network)
Dolby NR OUT: 61 dB (IEC-A network)

FM tuner

Frequency range (EW,EE) ..... 87.5 – 108 MHz
(EE) ..... 65 – 74 MHz
Usable sensitivity
..... 11 dBf (1.0 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity .... 16 dBf (1.7 µV/75 Ω, mono)
Signal-to-noise ratio ..... 70 dB (IEC-A network)
Distortion ..... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response ..... 30 – 15,000 Hz (±3 dB)
Stereo separation ..... 40 dB (at 65 dBf, 1 kHz)

MW tuner

Frequency range ..... 531 – 1,602 kHz
Usable sensitivity ..... 18 µV (25 dB) (S/N: 20 dB)
Selectivity ..... 50 dB (±9 kHz)

LW tuner

Frequency range ..... 153 – 281 kHz
Usable sensitivity ..... 30 µV (30 dB) (S/N: 20 dB)
Selectivity ..... 50 dB (±9 kHz)

Note:

- Specifications and the design are subject to possible modification without notice due to improvements.